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OBSERVATIONS AT HONOLULU.

Through the kind cooperation of Mr. Curtis J. Lyons, Meteorologist to the Government Survey, the monthly report of meteorological conditions at Honolulu is now made partly in accordance with the new form, No. 1040, and the arrangement of the columns, therefore, differs from those previously published.

Meteorological observations at Honolulu, September, 1899.

The station is at 31° 18' N., 157° 50' W.

Pressure is corrected for temperature and reduced to sea level, and the gravity correction, -0.06, has been applied.

The average direction and force of the wind and the average cloudiness for the whole day are given unless they have varied more than usual, in which case the extremes are given. The scale of wind force is 0 to 12, or Beaufort scale. Two directions of wind, or values of wind force or amounts of cloudiness, connected by a dash, indicate change from one to the other.

The rainfall for twenty-four hours has always been measured at 7:30 p.m., not 1 p.m., Greenwich time, on the respective dates.

The rain gage, 8 inches in diameter, is 1 foot above ground. Thermometer, 9 feet above ground. Ground is 48 feet, and the barometer 50 feet above sea level.

Date.	Pressure at sea level.		During twenty-four hours preceding 1 p.m., Greenwich time, or 2:30 a.m., Honolulu time.										
	Temperature.		Temperature.		Means.		Wind.		Sea-level pressures.		Total rainfall at 9 a.m., local time.		
	Dry bulb.	Wet bulb.	Maximum.	Minimum.	Dew-point.	Relative humidity.	Prevailing direction.	Force.	Average cloudiness.	Maximum.	Minimum.	Maximum.	Minimum.
1.....	29.96	74	67	54	76	63.8	+	ne.	2-4	5	30.08	29.96	0.08
2.....	29.95	74	66.5	53	72	63.8	64	ne.	2-4-0	6-2	30.01	29.93	0.05
3.....	30.00	75	67	54	71	62.7	61	ne.	3	2	30.02	29.92	0.00
4.....	30.03	74	67	54	74	63.0	60	ne.	3	2	30.05	29.95	0.00
5.....	29.98	73	67.5	55	74	62.7	61	ne.	3	2	30.06	29.95	0.06
6.....	29.98	72	68	54	71	64.5	65	ne.	4	5	30.03	29.94	0.04
7.....	30.04	75	69	54	72	64.7	67	ne.	4	4	30.06	29.98	0.03
8.....	30.04	75	69	54	73	65.5	65	ne.	4	1	30.08	30.00	0.00
9.....	29.97	76	69	55	74	65.0	65	nne.	3	2-5	30.05	29.97	0.00
01.....	29.90	75	68	58	75	65.7	62	nne.	3	4-6	29.97	29.88	0.02
11.....	29.92	74	68.5	51	75	65.0	68	nne.	3	7-4	29.96	29.88	0.08
12.....	29.90	77	71.5	58	73	68.5	60	ne.	1	3	29.96	29.90	0.03
13.....	29.89	75	67.5	54	76	68.5	72	ne.	3	8	29.96	29.19	0.00
14.....	29.85	70	67.5	54	75	65.0	68	ene.	4-0	4-0-4	29.63	29.81	0.01
15.....	29.87	72	67	55	69	65.7	69	se-ne.	3	2	29.91	29.81	0.00
16.....	29.98	75	67.5	54	72	68.3	63	nne.	3-4	3	29.97	29.86	0.00
17.....	29.94	74	68	58	74	62.5	59	ne.	3	2	29.98	29.91	0.01
18.....	29.94	74	66.5	54	73	63.5	63	ne.	3	3	29.98	29.91	0.00
19.....	29.94	75	67.5	52	71	62.3	60	ne.	3	5	30.00	29.90	0.01
20.....	29.99	75	67.5	53	73	63.8	61	ne.	3	6	30.02	29.94	0.01
21.....	29.98	72	68.5	53	74	64.5	66	nne.	3	6	30.05	29.97	0.04
22.....	29.98	75	69	51	72	67.8	77	ne.	2-5	6	30.08	29.95	0.14
23.....	29.95	74	68	58	73	66.7	70	ne.	4	3	29.99	29.93	0.08
24.....	30.00	75	68.5	54	71	65.0	64	ne.	2	4-2	30.05	29.95	0.00
25.....	29.95	75	68	55	75	65.3	65	ne.	2	7	30.07	29.99	0.00
26.....	29.98	72	68	54	75	63.7	63	ne.	2-4	9	30.09	29.96	0.08
27.....	29.98	73	67.5	51	71	67.5	74	ne.	2	7-3	29.99	29.91	0.01
28.....	29.94	73	67	54	72	64.3	64	ne.	2	3	29.99	29.90	0.00
29.....	30.02	75	67.5	54	73	68.3	62	ene.	2	2	30.06	29.94	0.00
30.....	29.98	70	68.7	54	75	68.7	62	ene.	4	4	30.09	29.97	0.08
Sums.....													
Means.....	29.96	73.9	67.9	58.5	73.1	64.6	65.0		2.9	4.5	30.015	29.927	0.80
Departure.....	0.00					-2.0	-2.0			+0.5			-1.35

Mean temperature for September, 1899 ($6+2+9$), $+3=77.1^{\circ}$; normal is 77.5° . Mean pressure for September ($9+3$) $= 29.967$; normal is 29.969 .

* This pressure is as recorded at 1 p.m., Greenwich time. [†]These temperatures are observed at 6 a.m., local, or 4:30 p.m., Greenwich time. [‡]These values are the means of $(6+9+2+9)+4$. [§]Beaufort scale.

MEXICAN CLIMATOLOGICAL DATA.

Through the kind cooperation of Señor Manuel E. Pastrana, Director of the Central Meteorológico-Magnetic Observatory, the monthly summaries of Mexican data are now communicated in manuscript, in advance of their publication in the Boletín Mensual. An abstract, translated into English measures, is here given, in continuation of the similar tables published in the MONTHLY WEATHER REVIEW since 1896. The barometric means have not been reduced to standard gravity, but this correction will be given at some future date when the pressures are published on our Chart IV.

Mexican data for August, 1899.

Stations.	Altitude.	Mean barometer.	Temperature.			Relative humidity.	Precipitation.	Prevailing direction.
			Max.	Min.	Mean.			
Colima.....	Feet.	Inch.	° F.	° F.	° F.	%	Inch.	
			89.6	69.8
Culiacán Rosales (E. d. S.).....	112	29.69	98.6	73.4	85.8	73	4.35	ne.
Durango (Seminario).....	6,348	24.05	91.4	56.1	72.1	55	0.79	sw.
Guanajuato.....	6,761	23.70	82.6	55.0	66.7	62	4.98	ne.
León (Guanajuato).....	5,934	24.30	84.4	50.4	68.4	64	2.93	se.
Méjico (Obs. Cent.).....	7,472	23.06	77.9	50.0	61.9	69	5.18	ne.
Morelia (Seminario).....	6,640	23.98	76.5	54.9	68.5	80	5.90	e.
Puebla (Col. Cat.).....	7,112	23.86	77.0	49.8	66.7	77	5.85	se.
Saltillo (Col. S. Juan).....	5,399	24.78	87.8	63.0	75.2	57	0.78	nnw.
San Isidro (Hac. de Guanajuato).....			78.4	67.1	72.7	64	4.72	se.
Silao.....	6,063	24.28	79.7	68.8	70.3	64	4.46	ene.
Zapotlán (Seminario).....	5,078	25.12	81.0	52.0	67.8	67	7.53	ese.

Mexican data for September, 1899.

Stations.	Altitude.	Mean barometer.	Temperature.			Relative humidity.	Precipitation.	Prevailing direction.
			Max.	Min.	Mean.			
Colima.....	1,600	28.27	98.9	63.3	77.7	76	9.51	sw.
Culiacán Rosales (E. d. S.).....	112	29.71	100.8	74.7	86.5	67	2.50	ne.
León (Guanajuato).....	5,934	24.85	81.3	46.2	65.5	67	4.53	s.
Méjico (Obs. Cent.).....	7,472	23.10	74.1	44.6	60.1	70	6.68	n.
Morelia (Seminario).....	6,401	23.98	75.2	48.9	61.7	78	6.67	se.
Oaxaca.....	5,184	25.08	91.8	50.0	67.1	82	5.69	nw.
Puebla (Col. Cat.).....	7,112	23.98	75.2	44.4	64.9	81	6.01	ne.
Saltillo (Col. S. Juan).....	5,399	24.86	80.6	50.0	66.7	69	4.26	n.
San Isidro (Hac. de Guanajuato).....			75.2	64.4	70.4	72	sw.
Silao.....	6,063	24.32	76.8	54.5	68.0	62	4.65	ene.
Zapotlán (Seminario).....	5,078	25.12	81.0	52.0	67.8	67	7.53	se.

THE ORIGIN, PATHS, AND LIMITING ZONES OF THE TYPHOONS OF THE ORIENT.

(An address by Paul Bergholz, Director of the Meteorological Observatory at Bremen. Read before the Section of Physics and Meteorology at the seventy-first meeting of German scientists, Munich, September 19, 1899. Translated by the Editor.)

In 1897 a work was published¹ in which there is brought together and skilfully combined into a whole all the extensive material relative to the hurricanes of the Tropics that had, up to that time, been collected by the observatories at Hongkong, Tokio, Manila, and Shanghai. Especially numerous are the observations collected in Manila, because there is scarcely a single large atmospheric disturbance that develops in the waters of the Orient that does not make itself felt in the Philippines. Scattered through the book, as was appropriate since it had a purely practical object, are some general considerations relative to the origin, the paths, and the zones of hurricanes. We will at present examine these views more closely but, of course, can not reproduce the extensive tabular material.²

¹ Baguios ó Ciclones Filipinos. Estudio Téorico-Práctico por el P. José Álgue, S. J., Director del Observatorio. Manila, 1897.

² Compare Bergholz, "Die Orkane des Fernen Ostens." Max Nössler, Bremen und Shanghai, 1899.